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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,065	06/05/2001	Robert F. Scalese	31027-pa	8094

7590 11/29/2002
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EXAMINER

VAN, QUANG T

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,065

Applicant(s)

SCALESE ET AL.

Examiner

Quang T Van

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-25, 34-37, 44-50, 54, 55 and 58-64 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-50 and 61-64 is/are allowed.
- 6) ☒ Claim(s) 20-25, 34-37, 54, 55 and 58-60 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Specification

1. The abstract of the disclosure is objected to because the legal phraseology such as "said" often used in patent claims should be avoided in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Applicant is advised that should claims 54 and 55 be found allowable, claims 54 and 55 will be objected to under 37 CFR 1.75 as being a substantial **duplicate** thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 20-21 and 54-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 20, "a cylindrical microwave" recited at line 2 is indefinite because it is unclear. It should be changed either to "a cylindrical microwave **chamber**" or "a cylindrical microwave **cavity**" for a clear recitation. Correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 20, 21, 54, 55 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (US 4,753,889) in view of Smith (US 4,851,630) and Collins (US re.34,373) all cited by applicants. Collins'889 discloses a method for loss on drying which includes the steps of placing a specimen in a microwave chamber (column 8, lines 5-7), monitoring the microwave energy within the cylindrical microwave while powering the microwave to dry the specimen (column 2, lines 64-68). However, Collins'889 does not disclose the microwave chamber being a cylindrical chamber and venting moisturing moisture from the microwave during a drying process. Smith discloses a microwave chamber (22) having a cylindrical shape (col. 3, lines 63-64), and Collins'373 discloses venting moisturing moisture from the microwave during a drying process (column 5, lines 23-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Collins'889 a microwave chamber being a cylindrical chamber as taught by Smith for the purposes of assisting in the tuning of the microwave energy supplied to the chamber, and venting moisturing moisture from the microwave during a drying process as taught by Collins 373 in order

Art Unit: 3742

to provide the microwave chamber with a venting means to exhaust the volatiles and gases generated by the specimen being processed in the microwave.

7. Claims 22-25 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (US 4,753,889) in view of Smith (US 4,851,630), Collins (US re.34,373) and further in view of Risman et al (US 5,632,921) all cited by applicants. Collins'889, Smith and Collins'373 disclose substantially all features of the claimed invention except said cylindrical microwave containment chamber including a pair of portals disposed therein, and a waveguide operatively coupled between said microwave energy source and said portals. Risman discloses, a cylindrical microwave containment chamber (320) including a pair of portals (366, 368) disposed therein, and a waveguide (361) operatively coupled between said microwave energy source and said portals (366, 368). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Collins'889, Smith and Collins'373 cylindrical microwave containment chamber including a pair of portals disposed therein, and a waveguide operatively coupled between said microwave energy source and said portals as taught by Risman in order to delivery microwave energy to the chamber.

8. Claims 34-37 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (US 4,753,889) in view of Collins (US re.34,373) both cited by applicants, and Holst et al. (US 5,321,897). Collins'889 discloses a method for loss on drying which includes the steps of placing a specimen in a microwave chamber (column 8, lines 5-7), applying microwave energy to a sample having a known weight (column 8, lines 7-9). However, Collins'889 does not disclose the step of monitoring the microwave

Art Unit: 3742

energy changes within the cylindrical microwave while powering the microwave to dry the specimen and surceasing the applied microwave energy as a function of the monitored microwave energy. Collins'373 discloses the step of monitoring the microwave energy changes within the cylindrical microwave while powering the microwave to dry the specimen (column 6, lines 40-53). Holst discloses step of surceasing the applied microwave energy as a function of the monitored microwave energy (column 8, lines 51-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Collins'889 the step of monitoring the microwave energy within the cylindrical microwave while powering the microwave to dry the specimen as taught by Collins'373 in order to provide different heating levels during the drying process and step of surceasing the applied microwave energy as a function of the monitored microwave energy as taught by Holst in order to protect the heating system.

9. Claims 44-50 and 61-64 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest the step of comparing the sensed radiation to the algorithm for determining a benchmark correlative to an endpoint condition as recited in claims 44 and 61; the step of comparing a transition of slope on the characteristic radiation curve with a transition of slope on the specimen radiation curve, and continuing to radiate the specimen until a predetermined endpoint condition has been met based on the comparing step as recited in claims 48 and 62; the step of establishing a benchmark correlative to a level of microwave energy sensed by a

Art Unit: 3742

sensor and comparing the monitored energy level with the benchmark level for controlling a drying process of the sample as recited in claims 49 and 63; and the step of establishing a characteristic radiation curve of a sample type correlative of its radiation absorbability. And comparing subsequently sensed levels of radiation within the chamber with the characteristic curve for determining an endpoint condition as recited in claims 50 and 64.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Holst et al (US 5,315,765) discloses a high-efficiency fabric dryer.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang Van whose telephone is 703-306-9162. The examiner can normally be reached 8:30 to 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone numbers for this group is 703-782-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0861.


QV

November 25, 2002


Quang Van

Patent Examiner

AU 3742